UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

December 22, 2005

Mr. Donald Silawsky
Office of Petroleum Reserve
Department of Energy
1000 Independence Avenue S.W.
Washington, DC 20585-0031

RE: Proposed Expansion of the Strategic Petroleum Reserve Scoping Comments Bruinsburg and Richton, Mississippi sites

Dear Mr. Silawsky:

In accordance with Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) Region 4 reviewed the information you provided regarding the proposed Expansion of the Strategic Petroleum Reserve (SPR) regarding the Richton, Mississippi and Bruinsburg Salt Dome sites. The purpose of this letter is to provide you with our comments

We completed our review of the project information you provided, and also met with your staff and contractors at their request for a briefing regarding the Richton, MS site. We appreciate their efforts to meet with us in our office in Atlanta.

We appreciate the opportunity to comment on the proposed project, and look forward to reviewing the Draft EIS. If you have any questions, please contact Ramona McConney of my staff at [redacted].

Sincerely,

Heinz Mueller

Heinz Mueller, Chief
NEPA Program Office

cc: EPA Region 6

EPA Region 4 Scoping Comments
Strategic Petroleum Reserve Expansion
Bruinsburg and Richton, Mississippi sites

General:

EPA Region 4 appreciates your early coordination and briefing with us regarding this proposed project. The presentation and illustrations you provided were helpful. Due to the new infrastructure that would be required if the Richton or Bruinsburg site were selected as a SPR site, EPA has concerns regarding several aspects of the project. The EIS should fully describe and discuss anticipated environmental impacts, both direct and cumulative. Also, the criteria for site selection should be fully described.

Impacts should be avoided/minimized to the maximum extent feasible. We appreciate that the potential pipeline locations would follow existing corridors. Placement of brine diffusers and pipelines need to avoid/minimize impacts to critical habitats and wetlands. The site selection for the brine diffusers should avoid areas with live bottoms such as hard/soft corals, seagrasses and other significant benthic assemblages. The extent of such areas with limited non-mobile organisms (sessile benthos) should encompass the area below the salinity plume. In contrast, areas with good flushing for the good mixing should be selected. The salinity plume should also be described in terms of its areal extent and salinities (including maximum salinities predicted and comparisons to ambient salinities). The continuous or intermittent nature of the brine discharges should also be documented. The overall timeframe for these discharges should also be discussed, to help assess the magnitude of the increased salinities. The EIS should describe mitigation plans for unavoidable impacts.

Alternatives:

Concerns exist regarding the quantity of surface water withdrawals which would be necessary for the project. The EIS should evaluate potential sources of water for the project, including surface water, groundwater, and other possible sources.

Relative to hurricane influences, the Bruinsburg and Richton sites have the advantage of being further inland than the other considered sites (aggregation of *all* SPR sites along coastal areas has obvious disadvantages). Conversely, Richton has the disadvantage of requiring longer brine and oil pipelines, which could have environmental impacts -- even if collocated -- and be more expensive. The Bruinsburg site would require a long oil distribution pipeline, but the brine disposal pipeline to wells located along the Baton Rouge crude oil pipeline would be shorter.

Identification of a preferred alternative in the DEIS may facilitate review and comment of the DEIS. Also, various environmental permits for this project will be required, and the permitting processes need to be given early consideration.

Environmental Justice & Endangered Species Act:

These impacts should be assessed as part of the pipeline studies. Emphasis should be placed on collocating new brine and oil pipelines in existing ROWs if these utilities are compatible. EPA will defer to FWS for ESA issues.

Secondary and Cumulative Impacts:

These impacts relate to those effects that would not occur but for the project (secondary or induced impacts) and those proposed or existing projects within the project area that are reasonably foreseeable. Emphasis would be for those projects with similar impacts to the proposal (e.g., if a desalinization plant was located nearby that also had a brine disposal impact). CEQ provides guidance for the cumulative impacts assessment at: ceq.eh.doe.gov/nepa/ccenepa/ccenepa.htm.

Intake Water:

If surface waters are used as source water, the entrainment of fish eggs and larvae need to be considered. Also, if these surface waters are contaminated, the disposal of these contaminants must be considered as part of the NPDES permit for the brine discharge. For both surface or groundwater use, the volume and effects of such withdrawals should be discussed -- particularly since these waters would be consumed, i.e., used and discharged to sea rather than returned to the source. Consumptive use could lower water tables, drain wetlands, and limit agriculture.

NPDES Discharges:

Construction of the disposal and distribution pipelines will need to be considered for NPDES coverage under the Mississippi's General Permit for Storm Water Discharges from Construction Activities.

The EIS should fully describe anticipated NPDES discharges. DOE will need to coordinate NPDES Permitting activities with MSDEQ for proposed point source discharges in to waters of the State of Mississippi, and with EPA for proposed discharges into federal waters in the Gulf of Mexico (if the Richton MS site were selected). If the Bruinsburg MS site were selected, brine disposal would take place offsite in underground injection wells.

Discuss alternative operational and disposal options, including no discharge, and the economic impact on the community for each.

Particular attention should be given to identify pollutants of concern in the source of raw water intakes.

Assess potential impacts on live bottoms in the vicinity of brine water discharge in the Gulf of Mexico.

Hydrocarbon Storage and Underground Injection Control (UIC) Wells:

The MS State Oil and Gas Board has regulations for the drilling, construction and permitting of hydrocarbon storage and UIC disposal wells and the DOE will need to coordinate with the Oil and Gas Board at various stages should any of the MS candidate sites be selected.

Air Quality:

The EIS should fully describe anticipated air emissions, measures to avoid/mitigate impacts, and compliance with air quality regulations. Air emissions should be discussed in the EIS, and related to the attainment status of the area. Emission sources include the oil blanket used during solution mining, construction equipment, and compressor stations along pipelines.

Land Use:

To the extent feasible, the land use surrounding the selected site should be controlled. EPA defers to DOE regarding site security.

Section 106:

We are aware that there are significant concerns regarding historic preservation at the Bruinsburg Salt Dome site. EPA recommends that the DOE coordinate with the State Historic Preservation Office regarding cultural resources and historic preservation. Therefore, EPA defers to the parties involved in the Section 106 consultation to consider and to address those potential effects associated with the proposed project.